Heineken in Sierra Leone

The local sourcing of Sorghum by the Sierra Leone Brewery Limited (SLBL)



Roos Apotheker

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1. Introduction to the business

The Sierra Leone Brewery Limited (SLBL) was established in Freetown in 1962. During the civil war (1991 -2002) the brewery was destroyed and used as quarters by the rebels from the Revolutionary United Front (RUF). After the war investments and rebuilding took place to get the brewery up and running again. Since then production is increasing, the share of SLBL drinks in the market is growing, and the brewery started with the project of local sourcing of sorghum.

Box 1: Current Shareholders

Major Shareholders of SLBL 2012:

- Heineken International (85%)
- Diageo (Guinness International) (10%)

Minority shares (5%):

- Paterson Zochonis (PZ)
- Local Sierra Leonean Public

The vision of the brewery is "To be an exemplary company contributing to the sustainable development of Sierra Leone by creating more value to all stakeholders."

Beer & malts

SLBL sells around 110.000 Hectolitres of drinks annually. Three types of drinks are produced: Star (lager), Guinness (stout) and Maltina (a malt drink). The Heineken brand is also sold through the brewery, but is imported.

All drinks are brewed for the local market. Through marketing and branding, the Sierra Leonean market still has growth potential. The introduction of a new bottle, label and recipe increased sales of the STAR brand strongly in 2011. SLBL's overall market share has increased over the years from 65% in 2008 towards 85% in 2011. Clients are 90% catering facilities and around 10% home consumption.

Table 1: Revenues SLBL 2007-2011

SLBL - Revenue development								
Year	2007	2008	2009	2010	2011			
Revenue - Leones	31.491.862.000	35.167.309.000	36.485.869.000	44.743.500.000	57.116.600.000			
Revenue - Euro	8.571.573	9.313.576	7.857.976	9.139.250	9.383.441			

SLBL has 116 direct employees and uses casual and seasonal labour. Management exists of a team of 5 heading the following departments: Commerce, Supply Chain (incl. procurement), Finance and Human Resources. Since March 1 2012 SLBL is managing local sourcing as part of their business. The years before, management of local sourcing was partly outsourced to an NGO (EUCORD) and local consultancy (Vancil).

Local sourcing of Sorghum

Beer consists of several ingredients: water, malted barley and hops. Malted barley is a raw material that has to be imported, since it does not grow in Sierra Leone. However, sorghum has potential to partly substitute malted barley and can be grown locally. In other African countries sorghum is already used as a substitute for malted barley in the production of beer.

About six years ago, Mr Tom de Man (then the Regional President for Africa and the Middle East at Heineken International) was asked by the former President (President Kabbah) whether Heineken could involve more local farmers and local people in the brewing business. His driver was to help poor farmers and labourers acquire an income (especially in the post-war context).

Picture 1: Sorghum



Before the war, SLBL used to import most of the ingredients for beer. As Tom de Man was already contemplating on possibilities of local sourcing to sustainably contribute to development and at the same time to cut company costs, he decided to give it a go. In 2005 arrangements were made to start a local supply chain of sorghum.

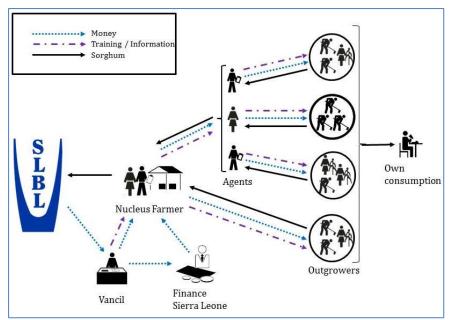
2. Supplier profile

Around 3000 farmer families are supplying sorghum to the brewery. This number is still growing. There are roughly three types of farmers: the Nucleus farmers, agents and the outgrower farmers/groups (see figure 1).

At this moment there are 32 nucleus farmers, who all represent a district in Sierra Leone. These nucleus farmers have a direct relation with the brewery and other support agencies (local consultant (Vancil), finance institutions). Nucleus farmers manage relations with outgrower networks in their district and in turn provide services to these outgrowers.

Since nucleus farmers need to be responsible for their financial management and networks, they are selected by the brewery among others on level of education and literacy, financial capital and

Figure 1: Simplified Supply chain of sorghum



SLBL manages relations with nucleus farmers, who in turn manage relations with agents and outgrowers

networks, although they will also receive training to upgrade their skills. Nucleus famers need financial capital to pre-finance the first load of sorghum received from their outgrowers (which amounts to 300 bags of 50 kg sorghum). Next to pre-financing, they make investments in among others creation of a storage, communication strategies to reach outgrowers and transport. When successful (when they deliver right quantity and quality to SLBL), nucleus farmers get access to bank loans for which the brewery gives quarantees.

All nucleus farmers receive financial trainings, pre-harvesting and pre-planting trainings. They also receive 'start up kits' comprising of seeds, scales, tarpaulin and empty bags. Some of these items are paid back to the company after the harvest. Bags with SLBL name tags are provided for free by SLBL. SLBL only accepts sorghum delivered in these bags, to harness quality and to prevent side selling by other non-registered farmers. The nucleus farmers are organized in a committee, although this committee is relatively new and not very active yet.

A district of a nucleus farmer exists of several chiefdoms. In many cases, the nucleus farmer appoints agents, who in turn represent the chiefdoms. The nucleus farmer and agents build relations with outgrower farmers to secure supply of sorghum. They help outgrowers to grow the sorghum in the right variety, quality and quantity, they take care of transport between the outgrower and the nucleus farmers, and they pass on training knowledge received from the company and pre-finance the outgrowers when needed. The outgrowers supply sorghum to the nucleus farmers or agents for direct cash. The nucleus farmers then bulk the sorghum, transport it to Freetown and sell it to the brewery (see figure 1). The brewery covers the transport costs from the storage facilities of the nucleus farmer to the brewery.

Table 2: General characteristics of suppliers

Normalian	1 (2000 farmer families (and an and antennam)
Number	+/- 3000 farmer families (nucleus, agents and outgrowers)
	Northern province: Kambia, Port Loko, Bombali, Tonkolili, Koinadugu
Geography	Southern province: Pugehum, Mohamba, Bonth, Bo
Geography	Eastern province: Kono, Kailahim, Kenema
	Western rural: Western rural
Size (owned hectares)	Between 1 and 50 hectares
Age (average)	18 years and above
	For outgrowers almost balanced (no hard data)
Gender	For nucleus farmers: 7 out of 32 nucleus are female
Property	
(land, machines etc.)	Some own land, few own machines (3 farmers have tractors)
Organizational level	Nucleus farmers, agents, outgrower groups
Health	N.A.
Family situation	Family size ranges from 5-15 members on average (some exceptions)
	Low: Outgrowers are not all literate
Education	Nucleus farmers have at least had basic education

In principle, any farmer who wants to join in the sorghum production as an outgrower can, they simply need to contact the nucleus farmer of their district. Outgrowers are usually organized in groups per chiefdom or village. These groups consist of 10 to 25 members on average. They have a group leader who handles financial issues and communication with the nucleus farmer. Profiles of outgrowers are diverse. There are large scale outgrowers who own the land they work on, but also very small scale outgrowers who are able to use the land of others. Before sorghum, many outgrowers were only engaged in subsistence farming. Outgrowers are both men and women, from all kind of tribes. Poverty levels are high in Sierra Leone, 70% of the population lives below the poverty line (2004 data). Due to the opportunity of sorghum, poverty levels of involved farmers are reduced and farmers increased their income significantly (also see Deters, 2010¹)

Most farmers also produce farm rice (partly as a staple crop) and/or other products like groundnuts, vegetables etc. next to sorghum. Most outgrower farmers stated that sorghum makes up about half of their income. For the nucleus farmers sorghum is a core business and income generated from sorghum is more than half of their income. In the near future the dependence on sorghum will probably increase, since farmers are increasing their sorghum production (outgrowers as well as nucleus farmers).

Access to land is not stated as a problem by the interviewed farmers. If someone wants to start farming, but doesn't have ownership over land, he/she approaches the chief or owner of land that is not being cultivated, for allowance to 'walk on' the land and use it for production. He/she then gives a 'token of appreciation' to the owner of the land.

The infrastructure in rural Sierra Leone on the other hand is poor. Roads are not maintained and many regions are difficult to travel to. In many parts of the country there is also no electricity grid. Some people have generators, but access to electricity is low.

¹ Deters, Anne (2010) *Sorghum Supply Chain Sierra Leone – A sustainable project?* Bachelor thesis, Stenden University, Emmen

3. Business drivers for starting up Local Sourcing

Why did Heineken decide to source local? The first driver is economic. Local sorghum is overall cheaper when taking into account exchange rate and import cost of malted barley. Sorghum is also more stable in price than imported malted barley. Taking into account that it took 5 years for local sourcing of sorghum to get to this stage.

The second driver is the social impact of the company. For HEINEKEN it is key that the company has a positive impact on the communities in which it operates, especially in emerging markets, from a responsibility perspective. This is both a local driver for SLBL and a driver for Heineken International. Not all Sierra Leoneans are aware that the drinks produced by SLBL have ingredients that are sourced local, but a growing part of the population is informed, which influences their choice of beer. For Heineken International, local sourcing is part of a larger program in all their African businesses. Aim of the program is to source 60% of their raw materials locally in Africa (by 2020), and thus to contribute to local economic development. This strengthens Heineken's social image worldwide.

Box 2: Example of publicity on local sourcing

New York City, 22 September 2010: "Last night, during the Millennium Development Goals (MDG) Summit hosted by the United Nations, Heineken received the 2010 World Business and Development (WBD) Award for its groundbreaking sustainable local supply chain initiative in Sierra Leone." (Press release Heineken 22-09-2010)

By investing in local sourcing, HEINEKEN is contributing to the development of the country, by engaging local farmers and providing them with an income. In a statement on local sourcing on their website they write:

"Heineken endeavors to source as much as possible of its raw materials locally. To help empower thousands of people across the communities where we are active. We aim to secure a sustainable supply of raw materials. Moreover, in the right quantity and quality and at fair and acceptable return and costs. Many of our local breweries run projects helping local farmers compete against imported grains, raising smallholder farmers' incomes, which contributes to the alleviation of poverty. Locally produced ingredients shorten our supply chain and the diversification of raw material sourcing. Both beneficial to our local suppliers as well as our company" ²

4. What are the required ingredients for doing local sourcing: conditions and steps?

The first step for starting to source locally was to study the feasibility (2005). In 2006 the Common Fund for Commodities (CFC), a UN organization with the aim of promoting commodity trade, became interested in the project. CFC funded a joint sorghum sourcing project in Ghana and Sierra Leone at the same time, together with Heineken and Guinness (the two major shareholders in both breweries). A five year trajectory for Sierra Leone, leading to a sustainable supply of sorghum was designed. The NGO EUCORD (The European Cooperative for Rural Development) was appointed as implementing agent. The main components of the five year project were:

Box 3: Costs for the five year local sourcing project

Total costs for the five year project in two countries (Ghana & Sierra Leone): USD 2.897.000

Of which the following parties contributed:

CFC: USD 1.527.000 (grant)

SLBL: USD 372.000

Guinness Ghana Breweries: USD 531.000 **Other Counterparts**: USD 647.000 (212.000 for

Sierra Leone and 255.000 for Ghana)

- 1. Development, test and introduce of new industrial sorghum varieties and technologies
- 2. Establishment of rapid-multiplication enterprises and collection centers
- 3. Training of producer associations and credit groups
- 4. Development of contract/partnership mechanisms between producers, input providers, intermediate agents and agro-processors
- 5. Training of input dealers and credit providers

² Available at: http://www.heinekeninternational.com/sustainability-heinekencares.aspx

1. Development, test and introduction of new industrial sorghum varieties and technologies

In 2005, Vancil (a consultancy company) was already hired to manage local implementation of the supply of sorghum. The SLARI (Sierra Leonean Agricultural Research Institute) was hired to do research on agricultural conditions and suitable varieties of sorghum for the production of beer. Three varieties were selected by SLARI and VANCIL and tested in two districts (Kambia and Port Loko) together with local farmers.

Box 4: Actions during the pilot project

2006 Project kick-off in Kambia & Port Loko:

- Approx.: 150 farm families were registered
- Average farm size was small 1 hectare was utilized
- Mixed cropping was mainly practiced which resulted to low yield
- Massive sensitization, training workshops & field days areas of production expanded and the production of sorghum increased tremendously
- Construction of two stores in Kambia district provided proper storage facilities for communities

Table 3: Number of farm families involved

Year	Farm families
2005/2006	150
2006/2007	390
2007/2008	780
2008/2009	1,080
2009/2010	1,500
2010/2011	2,500
2011/2012	+/- 3000

2. Establishment of rapid-multiplication enterprises and collection centers

In the first two years, it proved difficult to get farmers

enthusiastic to start with the sorghum production. Some reasons were that most farmers were engaged in subsistent farming and commercial farming was new to them. Another reason was that farmers did not trust NGOs because of earlier projects that were not successful. The farmers that agreed to join and plant sorghum, got direct cash for their produce and were satisfied and when other farmers took notice the ball started rolling. Quickly the local growing of sorghum for the brewery took off (Table 3). In order to manage growth Vancil started to identify nucleus farmers in several districts who then worked with outgrowers

producer associations and credit groups

The nucleus farmers received workshops, as to learn how to account for all crops. They were taught how to calculate costs of investments and profits. They also received training on agricultural practices of sorghum (how to get the right moisture content, how to weigh the bags of sorghum, pre-harvesting and pre-planting training). The nucleus farmers then were required to visit farmers and convince them to join the outgrower scheme. Outgrowers receive direct cash for the sorghum they deliver to the nucleus farmer. If outgrowers are in need of cash before harvesting, they can request the nucleus farmer for prefinancing. Usually they pay the loan back when they deliver sorghum. The nucleus farmers in term have access to finance from the bank Finance Sierra Leone (see box 5).

Box 5. Finance Sierra Leone (Finance Salone) Finance Salone is a micro finance institution with a mission to "contribute to the economic rebuilding of Sierra Leone by providing financial services to low-income entrepreneurs through a profitable microfinance institution with national scope". They aim to reach those people in those areas where normal banks are not available.

The nucleus farmers who produce sorghum are the first farmers they finance. Through the packaging of the loan with the guarantee of SLBL, Finance Salone is able to give out loans with a low risk failure. When they give out loans to nucleus farmers, Vancil is informed about the amount. When the farmers deliver the sorghum and get paid for their produce, they outstanding amount at Finance Salone is deducted from their pay slip and paid directly to Finance Salone. Farmers usually take loans 2 or 3 months before harvesting, with an interest rate of 2,5% per month.

4. Development of contract/partnership mechanisms between producers, input providers, intermediate agents and agro-processors

Contracts

Contracts between producers, input providers, intermediate agents and agro-processors include pricing, quotas, services & inputs and finance. In the beginning contract/partnership mechanisms were set up between the farmers, Vancil (intermediate agent) and SLBL. From 2012 Vancil will retreat, and SLBL will take over all the tasks and services of Vancil. This transition means that the sorghum project becomes a long-term sustainable business section within the company.

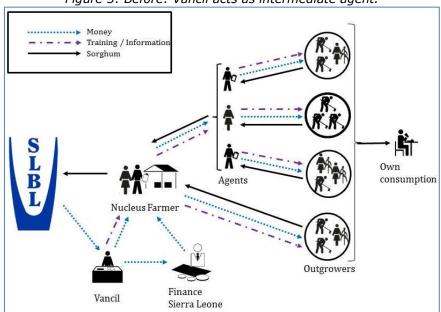
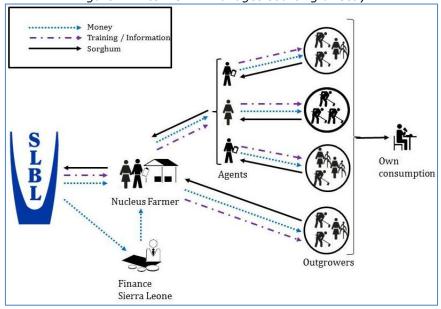


Figure 3: Before: Vancil acts as intermediate agent.

Figure 4: After: SLBL manages sourcing directly



Pricing

Currently pricing mechanisms take place at two levels. There is a price that the nucleus farmers receive from SLBL for a 50 kg bag of sorghum, and there is a price that the outgrower receives from the nucleus farmer for a 24 cm plastic tin of sorghum. Both prices have been agreed to remain stable between the nucleus farmers and SLBL for a period of three years (2010-2012), in return for the fact that SLBL was prepared to buy the heavy overproduction of 2010. The prices are based on local and global market price developments. At this moment, SLBL is the only buyer of sorghum on the market. Both SLBL and the farmers would like to have more diversified markets for sorghum since this would lower the dependency on each other, however so far without success.

In January 2011, the price for a 50 kg back was 90.000 Leones (around USD 21) and the price for a 24 cm plastic tin between 2.500 and 3.000 Leones (between USD 0.6 - 0.7). At the start of the project, the prices were relatively high (a premium), in order to encourage farmers to start with sorghum production. The price has not increased over the past three years and is now more in line with global price developments.

Quotas

In the first years, production increased slowly. In 2009/2010 it suddenly took off (see figure below) because farmers were attracted by direct cash for their produce (for other crops like rice, farmers usually do not get direct cash for their produce, they have to wait before other players sell the rice, which causes a delay in payment). The brewery could not process the volume produced in 2009/2010. However after consulting with EUCORD, CFC, Vancil and the farmers, it was agreed to buy the sorghum after all, for the sake of not losing good relations with the farmers. SLBL and the nucleus farmers agreed on setting quotas for the following years, making sure overproduction would not occur again. Quotas are set on the performance of the nucleus farmer in the previous years and are slowly growing (see figure 4).

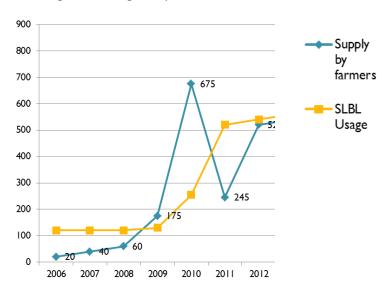


Figure 4: Sorghum produced and used in MT

Inputs and services

Nucleus farmers hire transport to transport sorghum from collection centres to the industry in Freetown and are reimbursed by SLBL for these transport costs. The nucleus farmers have to arrange the transport from the outgrower to their collection centres at their own costs. Other inputs provided are start-up kits for nucleus farmers, seeds and training.

Finance

First (before 1st of March) the nucleus farmers delivered the bags at SLBL, and after the bags were checked for weight and quality, they received their money from Vancil (within 24 hours). Vancil deducted possible outstanding debts to Finance Salone, and wrote a check for the farmers. Since the 1st of March 2012, this is the responsibility of the brewery. So the brewery acts as an intermediate agent for Finance Salone, who delivers loans to the farmers.

5. Training of input dealers and credit providers

All nucleus farmers and some agents and outgrowers received training from Vancil and SLARI, organised by EUCORD, including a financial training, pre-planting and pre-harvesting trainings, and farmer field school demonstrations. The nucleus farmers need to pass on their new knowledge to the outgrowers. This is also in the interest of the nucleus farmer, since they want to be provided with high quality and quantities of sorghum.

5. What are the costs and the returns for businesses

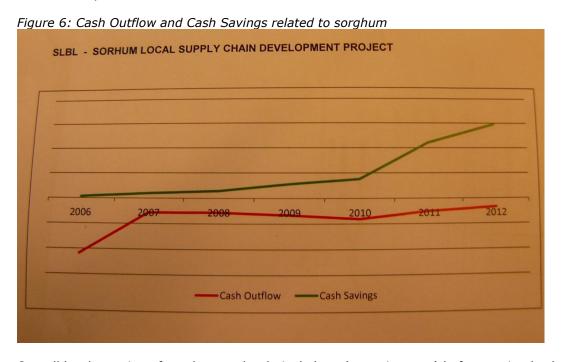
Costs

As described in chapter four, the investment costs that were made to set up the local sourcing system counted up to USD 372.000 for SLBL. Costs described here are the current and future costs that local sourcing of sorghum entails as a sustainable part of SLBL's business:

- Labour costs: SLBL hires two people full time to manage the local sourcing program. Vancil trained an employee for managing local sourcing. Next to this employee, a field officer is hired (he was already involved in the setup of local sourcing through EUCORD and Vancil, and knows most of the farmers involved).
- *Training costs*: Pre-planting and pre-harvesting trainings will continue. When needed other types of training will also be considered.
- *Transport costs*: SLBL will keep refunding the transport costs from the nucleus farmers to the brewery. Costs are refunded based on set prices by SLBL. Transport is also needed to visit the farmers in the field, by the two staff who will run the local sourcing project.
- Possible future costs are investments in new machinery. Currently sorghum is substituting
 malted barley for around 30%. With the current machines and production process, this
 percentage cannot go up. However, the capacity of the brewery is limited at this moment.
 If the market keeps growing and production can increase, new investments in machinery
 need to be made. At that moment, SLBL will probably invest in machinery that can take up
 higher percentages of sorghum.

Returns

Costs for raw materials at SLBL have decreased. The figure below shows that because of decreasing costs for sorghum due to reaching scale, the substitution of barley with sorghum has saved cash (the green line in Figure 6). There are risks involved with procuring from smallholders, but they are manageable since SLBL can always request Heineken International to ship in extra malted barley.



Overall local sourcing of sorghum took relatively long (over six years) before paying back on its investments (see Figure 7), but strong commitment form SLBL and social drivers helped the project to continue and succeed in the end.

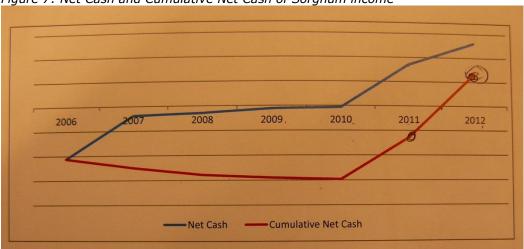


Figure 7: Net Cash and Cumulative Net Cash of Sorghum income

6. Incentives for small scale farmers

Discussions with five groups of farmers were facilitated. Each group consisted of a nucleus farmers, agents and outgrowers. The groups ranged from 3 to 10 participants. The five locations of these farmers are: Kono, Kabala, Makeni, Mile 91 and Magburaka.

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The discussions gave an overview of the benefits, the challenges and the changes in livelihood for the farmers who started producing sorghum for SLBL.

Benefits of selling sorghum to SLBL

Additional Income

All farmers value the income earned through sorghum as the greatest benefit. There are some extra costs involved for producing sorghum. These are mainly related to extra labour for burning and clearing of land, plowing, planting, weeding, harvesting and trashing. Some farmers only use (unpaid) family labour in the production process, while others hire labour. Compared to rice (the main staple crop) these operational costs are low. A 50 kg back of rice is currently 120.000 Leones against 90.000 Leones for a 50kg bag of sorghum. Overall sorghum is easier to grow with lower NP National Park
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inputs (e.g. seeds, fertilizers, perishability, easy to storage) compared to rice. Harvesting of sorghum can also be done out of the season, while rice needs to be harvested at the end of the rains. Another difficulty with rice is that most farmers do not directly receive money for their produce but have to wait for traders to pay.

Before SLBL came in, sorghum had little value in the community. In small quantities it was used as a food crop in the periods that rice is scarce. Now since farmers are making profits, sorghum is produced in large quantities. "Sorghum has more money than rice."

Farmers say that they are now able to pay school fees for children, improve their houses or, in some cases buy a motorbike. Some farmers who plant larger plots of sorghum have been able to start rice trading, some invested in vegetable seeds or bought livestock from the income generated through sorghum.

Access to services: loans

Through the local sourcing scheme farmers are able to access loans. The nucleus farmers are able to get a loan from Finance Salone and the outgrowers are able to access pre-finance from the nucleus farmers before the harvest. Outgrowers use the loans for paying school fees, but also for sorghum related production like paying labour costs, buying tools etc. The same happens for the nucleus farmers, when they get paid by SLBL. SLBL makes sure the outstanding amount of the loan is deducted from the payment and paid to Finance Salone directly. At the time of harvest, when sorghum is delivered, the outstanding amount of the loan is deducted from the sorghum income.

NCOME \$ (11114)

Knowledge on Farming (2333332)

Loans/accen to finance 322223

Figure 9: Outcome of a group discussion (1)

Figure 10: Outcome of a group discussion (2)



Knowledge - Training

The farmers appreciated the training, workshops and increase in knowledge they received. Some outgrowers stated that they can use the new knowledge on farming in the production of other crops.

Meeting new people - Social interaction

Through the sorghum project, groups are formed and connections are made with new people, new farmers and for the nucleus farmers also with farmers from other districts. They are able to learn from their peers, they learn from other traditions in other districts, and they are able to travel. They make new friends. This was considered as an important benefit.

Challenges farmers face

Pricing

Pricing was mentioned in all the groups as a challenge.. because prices were agreed to remain the same for three years according to the farmers. One 50 kg back of sorghum is since 2010 90.000 Leones when the nucleus farmer delivers it to the brewery. Outgrowers receive 2.500 Leones for one plastic 24cm bucket of sorghum. Outgrowers would like to be more involved in deciding prices.

Pests/Rodents

Sorghum is a long duration crop. It grows for six months. Farmers complain about pests and rodents. Monkeys also eat the crop and in some areas destroy part of the produce. Farmers would like to have fertilizers and pesticides to be able to produce higher yields.

• Dependency on SLBL for selling sorghum
Farmers discussed their dependency on SLBL. Since there are no other buyers, only SLBL
determines the market price for sorghum. Most farmers are confident that SLBL will

continue buying the sorghum at least for the coming 5 to 10 years. If not farmers will go back to rice farming or farming other crops.

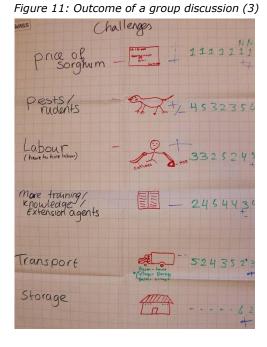
Trashing

Trashing is one part of the production process of sorghum that costs a lot of time and effort. Farmer would like to mechanize this part of the process.

More training / knowledge
 Some of the farmers would like to get more training and knowledge to be able to improve their farming practices.

Transport

Nucleus farmers are responsible transporting sorghum from their outgrowers to their storage. Many roads are difficult to travel and transport is scarce. If it is available, the costs are high. In some cases it is almost not cost efficient to transport sorghum from the outgrower to the nucleus farmer.



Storage

The nucleus farmers need to make sure they have proper storage for the sorghum. Some of the nucleus farmers have difficulties in finding the right places for storage.

• Relation with outgrowers

In some cases there are struggles between the outgrower and the nucleus farmers. Outgrowers do not always keep their promises, or deliver less than promised. In some cases nucleus farmers need to *chase* outgrowers to get their output.

7. Conclusions and challenges ahead

Main lessons learned

Win-win situation

Local sourcing for SLBL is a superb business case for all involved actors. Sourcing locally produced sorghum has above all been successful because farmers did not have sufficient alternative sources of income. The income out of rice was little and thus opportunity costs for producing sorghum are low. Growing sorghum therefore has attracted many local producers. Simultaneously the costs for using sorghum are substantially lower than importing barley and therefore also the company gains by local souring.

Local Sourcing from smallholders takes time, costs money and requires knowledge on local farming

To set up a local sourcing project however does take time and costs money. This local sorghum project took six years to become cumulatively profitable for SLBL. It takes this long because it involves building trust and managing relationships with several new stakeholders. Especially in a 'foreign' setting, this is challenging since there are cultural differences to overcome. Through partnering with CFC, SLBL was able to cover part of the total costs for committing farmers to sorghum production through public funding capacity building activities.

Use local staff and outsource activities – in order to build trust with the farmers
Involvement of local staff and service providers such as Vancil and EUCORD to build up relations with the farmers is extremely important as not all knowledge is available in the company. Hiring

local experts and development/agricultural experts speeds up understanding and communication. Once farmers were convinced by local staff members to join the sorghum program, they saw the benefits after production and were satisfied. This created a snowball effect: other farmers wanted to join when they saw their neighbor, family member or friend benefitting from local sourcing.

Over production

At SLBL, the sorghum project in 2010 got into problems. Too much sorghum was produced by the farmers, and the project leaders did not see this coming. This almost made the project fail, and raised costs for SLBL. In order not to harm relations with the farmers, SLBL decided to buy the overproduction, although they could not absorb it all. This problem was solved by introducing quotas for production in the years after. Memoranda of Understandings are now signed on maximum quotas for the nucleus farmers. The lesson learned is to clearly manage and communicate required volumes.

Monopoly situation

The above stated problem is also related to the unintended but existing monopoly position of SLBL on the demand side of the market. This creates risks for both the farmers as SLBL. If SLBL is unable to buy all the produce, the relationship with farmers will be harmed. For the farmers it is risky since they are dependent on SLBL as the only buyer and price setter for sorghum. There is no real alternative market yet. Farmers believe that SLBL will at least buy their sorghum in the coming 5 to 10 years. The only thing SLBL can do to keep the farmers trust is to clearly communicate about price setting and make sure it offers a competitive price.

Monitor pricing in the supply chain

It is in SLBL's interest to make sure all farmers benefit, not only to secure supply but also for the social drivers of local sourcing. At one point, nucleus farmers lowered the price paid for sorghum to the outgrowers. SLBL now checks the prices that outgrowers receive, and makes sure they benefit substantially from producing sorghum. Nucleus farmers receive a set price they have to pay the outgrowers, and this is monitored by SLBL staff.

Challenges for the future

The market for sorghum is expected to slowly grow. At a certain scale and for reaching the 60% local sourcing goal of Heineken International, SLBL will have to invest in new machinery that has the ability to use higher percentages of sorghum. The success of Sustainably Sourcing sorghum however also depends on externalities such as bad harvests (due to climate: weather, rodents/pests), competition on the sorghum market (if other market players decide to buy sorghum for a higher price) or local policies (e.g. subsidies on rice production). If any of these risks affect the sustainable supply of sorghum, SLBL is able to import malted barley again and farmers will refocus on rice, but this would be in nobody's interest.